

SAFETY DATA SHEET

| Section 1: Identification | | | | |
|--|---|-----------------------|--|-----|
| Section 1, Identification | | | | |
| Product | | | | |
| Distributor | SOLA Pharmaceuticals 655 Highlandia Drive, Ste B Baton Rouge, LA. 70810 Tel: 866.747.7365 Fax: 800.754.9550 www.solameds.us info@solameds.us | | | |
| NDC Number | 70512-797-01 / 24 (200mg per 100mL) 70512-798-01 / 24 (400mg per 200mL) | | | |
| Section 2: Hazard(s) Identification | | | | |
| Section 2, Hazard(s) Identification | | | | |
| Classification of the Substance or Mixture | | | | |
| GHS - Classification | Not classified as hazardous | | | |
| Label Elements | | | | |
| Signal Word | Not Classified | | | |
| Hazard Statements | Not classified in accordance with international standards for workplace safety. | | | |
| Other Hazards | An Occupational Exposure Value has been established for one or more of the ingredients (see Section 8). | | | |
| Note | This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace. | | | |
| Section 3: Composition/Information on Ingredients | | | | |
| Section 3, Composition/Information on Ingredients | | | | |
| Ingredient | CAS Number | EU EINECS/ELINCS List | CHS Classification | % |
| Hydrochloric Acid | 7647-01-0 | 231-595-7 | Skin Corr.1B (H314) STOT SE 3 (H335) | *** |
| Sodium Hydroxide | 1310-73-2 | 215-185-5 | Skin Corr. 1A (H314) | *** |
| Ropivacaine Hydrochloride | 132112-35-7 | Not listed | Acute 4; H302 Aquatic Acute 3; H402 Aquatic Chronic 3; H412 | 0.2 |

| Ingredient | CAS Number | EU EINECS/ELINCS List | CHS Classification | % |
|---------------------------|------------|-----------------------|--------------------|---|
| Water for Injection | 7732-18-5 | 231-791-2 | Not listed | * |
| Sodium Chloride | 7647-14-5 | 231-598-3 | Not listed | * |
| Citric Acid, Anhydrous | 77-92-9 | 201-069-1 | Not listed | * |
| Sodium Citrate, Dihydrate | 6132-04-3 | Not listed | Not listed | * |

Additional Information: Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.
 * Proprietary
 ** to adjust pH

In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

For the full text of the CLP/GHS abbreviations mention in this Section, see Section 16

Section 4: First-Aid Measures

Section 4, First-Aid Measures

Description of First Aid Measures

Eye Contact:

Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention immediately.

Skin Contact:

Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek medical attention.

Ingestion:

Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.

Inhalation:

Remove to fresh air and keep patient at rest. Seek medical attention immediately.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms and Effects of Exposure:

For information on potential signs and symptoms of exposure, See Section 2 – Hazards Identification and/or Section 11 - Toxicological Information.

Medical Conditions Aggravated by Exposure:

None known

Indication of the Immediate Medical Attention and Special Treatment Needed

Notes to Physician:

None

Section 5: Fire-Fighting Measures

Section 5, Fire-Fighting Measures

Extinguishing Media:

Extinguish fires with CO2, extinguishing powder, foam, or water.

Special Hazards Arising from the Substance or Mixture

Hazardous Combustion Products:

Formation of toxic gases is possible during heating or fire.

Fire / Explosion Hazards:

Fine particles (such as dust and mists) may fuel fires/explosions.

Advice for Fire-Fighters

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

Section 6: Accidental Release Measures

Section 6, Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

Environmental Precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and Material for Containment and Cleaning Up

Measures for Cleaning /Collecting:

Contain the source of the spill or leak. Absorb spills with non-combustible absorbent material and transfer into a labeled container for disposal.

Additional Consideration for Large Spills:

Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

Section 7: Handling and Storage

Section 7, Handling and Storage

Precautions for Safe Handling

Minimize generating airborne mists and vapors. Avoid inhalation and contact with skin, eye, and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash hands and any exposed skin after removal of PPE. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls. Refer to Section 12 - Ecological Information, for information on potential effects on the environment.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions:

Store as directed by product packaging.

Specific end use(s):

Pharmaceutical drug product

Section 8: Exposure Controls / Personal Protection

Section 8, Exposure Controls / Personal Protection

Control Parameters

HYDROCHLORIC ACID

| | |
|-------------------------------|-----------------------|
| ACGIH Ceiling Threshold Limit | 2ppm |
| Australia PEAK | 5 ppm |
| | 7.5 mg/m ³ |
| Austria OEL - MAKs | 5 ppm |

| | |
|----------------------------|--|
| Belgium OEL - TWA | 8 mg/m ³ 5 ppm |
| Bulgaria OEL – TWA | 8 mg/m ³ 5 ppm |
| Cyprus OEL – TWA | 8 mg/m ³ 5 ppm |
| Czech Republic – OEL – TWA | 8 mg/m ³ |
| Estonia OEL – TWA | 8 mg/m ³ 5 ppm |
| Germany – TRGS 900 – TWAs | 8 mg/m ³ 2 ppm |
| Greece OEL – TWA | 3 mg/m ³ 5 ppm |
| Hungary OEL – TWA | 7 mg/m ³ 8 mg/m ³ |
| Ireland – OEL – TWAs | 8 mg/m ³ 5 ppm |
| Italy OEL – TWA | 8 mg/m ³ 5 ppm |
| Japan – OELs – Ceilings | 8 mg/m ³ 2 ppm |
| Latvia – OEL – TWA | 3.0 mg/m ³ 5 ppm |
| Lithuania OEL – TWA | 8 mg/m ³ 5 ppm |
| Luxembourg OEL – TWA | 8 mg/m ³ 5 ppm |
| Malta OEL – TWA | 8 mg/m ³ 5 ppm |
| Netherlands OEL – TWA | 8 mg/m ³ |
| Poland OEL – TWA | 8 mg/m ³ 5 mg/m ³ |
| Portugal OEL – TWA | 5 ppm 8 mg/m ³ |
| Romania OEL – TWA | 8 mg/m ³ 5 ppm |
| Slovakia OEL – TWA | 8 mg/m ³ 5 ppm |
| Slovenia OEL – TWA | 8 mg/m ³ 5 ppm |
| Spain OEL – TWA | 8 mg/m ³ 5 ppm |
| Switzerland OEL – TWAs | 7.6 mg/m ³ 2 ppm |
| Vietnam OEL – TWAs | 3.0 mg/m ³ 5 mg/m ³ |
| SODIUM CHLORIDE | |
| Latvia OEL – TWA | 5 mg/m ³ |
| Lithuania OEL – TWA | 5 mg/m ³ |

SODIUM HYDROXIDE

| | |
|-------------------------------|-----------------------|
| ACGIH Ceiling Threshold Limit | 2 mg/m ³ |
| Australia PEAK | 2 mg/m ³ |
| Austria OEL – MAKs | 2 mg/m ³ |
| Bulgaria OEL – TWA | 2 mg/m ³ |
| Czech Republic OEL – TWA | 1 mg/m ³ |
| Estonia OEL – TWA | 2 mg/m ³ |
| France OEL – TWA | 2 mg/m ³ |
| Greece OEL – TWA | 2 mg/m ³ |
| Hungary OEL – TWA | 2 mg/m ³ |
| Japan = OELs – Ceilings | 2 mg/m ³ |
| Latvia OEL – TWA | 0.5 mg/m ³ |
| OSHA – Final PELs – TWAs | 2 mg/m ³ |
| Poland OEL – TWA | 0.5 mg/m ³ |
| Slovakia OEL – TWA | 2 mg/m ³ |
| Slovenia OEL – TWA | 2 mg/m ³ |
| Sweden OEL – TWA | 1 mg/m ³ |
| Switzerland OEL – TWA | 2 mg/m ³ |

The purpose of the Occupational Exposure Band (OEB) classification system is to separate substances into different Hazard categories when the available data are sufficient to do so, but inadequate to establish an Occupational Exposure Limit (OEL). The OEB given is based upon an analysis of all currently available data; as such, this value may be subject to revision when new information becomes available.

Ropivacaine hydrochloride

Occupational Exposure Band (OEB): OEB 3 (control exposure to the range of 10ug/m³ to < 100ug/m³)

Exposure Controls

Engineering Controls:

Engineering controls should be used as the primary means to control exposures. Use process containment, local exhaust ventilation, or other engineering controls to maintain airborne levels within the OEB range.

Personal Protective Equipment:

Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE). Contact your safety and health professional or safety equipment supplier for assistance in selecting the correct protective clothing/equipment based on an assessment of the workplace conditions, other chemicals used or present in the workplace and specific operational processes.

Hands:

Impervious gloves (e.g. Nitrile, etc.) are recommended if skin contact with drug product is possible and for bulk processing operations. (Protective gloves must meet the standards in accordance with EN374, ASTM F1001 or international equivalent.)

Eyes:

Wear safety glasses or goggles if eye contact is possible. (Eye protection must meet the standards in accordance with EN166, ANSI Z87.1 or international equivalent.)

Skin:

Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations. (Protective clothing must meet the standards in accordance with EN13982, ANSI 103 or international equivalent.)

Respiratory protection:

Under normal conditions of use, if the applicable Occupational Exposure Band (OEB) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEB (e.g. particulate respirator with a half mask, P3 filter). (Respirators must meet the standards in accordance with EN140, EN143, ASTM F2704-10 or international equivalent.)

Section 9: Physical and Chemical Properties

Section 9, Physical and Chemical Properties

| | |
|---|-------------------|
| Physical State | Solution |
| Color | No data available |
| Odor | No data available |
| Odor Threshold | No data available |
| Molecular Formula | Mixture |
| Molecular Weight | Mixture |
| Solvent Solubility | No data available |
| Water Solubility | Soluble |
| pH | No data available |
| Melting/Freezing Point (°C) | No data available |
| Boiling Point (°C) | No data available |
| Partition Coefficient: (Method, pH, Endpoint, Value) | |
| Ropivacaine hydrochloride | |
| No data available | Log P 2.15 |
| SODIUM CHLORIDE | |
| No data available | |
| HYDROCHLORIC ACID | |
| No data available | |
| SODIUM HYDROXIDE | |
| No data available | |
| Water for Injection | |
| No data available | |
| Sodium citrate, dihydrate | |
| No data available | |
| Citric acid, anhydrous | |
| No data available | |
| Decomposition Temperature (°C) | |
| No data available | |
| Evaporation Rate (Gram/s) | |
| No data available | |
| Vapor Pressure (kPa) | |
| No data available | |
| Vapor Density (g/mL) | |
| No data available | |
| Relative Density | |
| No data available | |
| Viscosity | |
| No data available | |

| | |
|---|---|
| Flammability | |
| Autoignition Temperature (Solid) (°C) | No data available |
| Flammability (Solids) | No data available |
| Flash Point (Liquid) (°C) | No data available |
| Upper Explosive Limits (Liquid) (% by Vol) | No data available |
| Lower Explosive Limits (Liquid) (% by Vol) | No data available |
| Section 10: Stability and Reactivity | |
| Section 10, Stability and Reactivity | |
| Reactivity | No data available |
| Chemical Stability | Stable at normal conditions |
| Possibility of Hazardous Reactions | |
| Oxidizing Properties | No data available |
| Conditions to Avoid | Fine particles (such as dust and mists) may fuel fires/explosions |
| Incompatible Materials | As a precautionary measure, keep away from strong oxidizers |
| Hazardous Decomposition Products | No data available |
| Section 11: Toxicological Information | |
| Section 11, Toxicological Information | |
| Information On Toxicological Effects | |
| Short Term | Anesthetic drug: may cause central nervous system and cardiovascular system effects |
| Known Clinical Effects | May cause tingling/itching (paresthesia), allergic reaction, decrease in blood pressure (hypotension), decreased heart rate (bradycardia), respiratory Depression |
| <u>Acute Toxicity: (Species, Route, End Point, Dose)</u> | |
| Ropivacaine hydrochloride | |
| Rat | IV LD50 9.9 mg/kg |
| Rat | Oral LD50 980 mg/kg |
| Mouse | Oral LD50 300 mg/kg |
| SODIUM CHLORIDE | |
| Rat | Sub-tenon injection (eye) LC50/1hr >42 g/m ³ |
| Rat | Oral LD50 3 g/kg |
| Mouset | Oral LD50 4g/kg |
| Rabbit | Dermal LD50 >10 g/kg |
| HYDROCHLORIC ACID | |
| Rat | Oral LD50 238 – 277 mg/kg |
| Citric Acid, Anhydrous | |
| Rat | Oral LD50 3000 mg/kg |
| <u>Irritation / Sensitization: (Study Type, Species, Severity)</u> | |
| SODIUM CHLORIDE | |
| Skin Irritation | Rabbit Mild |
| Eye Irritation | Rabbit Mild |

Citric Acid, Anhydrous

| | | |
|-----------------|--------|--------|
| Skin Irritation | Rabbit | Mild |
| Eye Irritation | Rabbit | Severe |

Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effec(s))

Ropivacaine Hydrochloride

| | | | | |
|------------------------------------|-----|--------------------|--------------------|----------|
| 2 Generation Reproductive Toxicity | Rat | No route specified | Dose not specified | Negative |
|------------------------------------|-----|--------------------|--------------------|----------|

HYDROCHLORIC ACID

| | | |
|-------------------------------|-------------------|----------|
| Bacterial Mutagenicity (Ames) | <i>Salmonella</i> | Negative |
| <i>In Vivo</i> Micronucleus | Rat | Negative |

Carcinogen Status

None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

HYDROCHLORIC ACID

| | |
|------|----------------------------|
| IARC | Group 3 (Not Classifiable) |
|------|----------------------------|

Section 12: Ecological Information

Section 12, Ecological Information

Environmental Overview

Releases to the environment should be avoided. Environmental properties have not been thoroughly investigated.

Toxicity

Aquatic Toxicity: (Species, Method, End Point, Duration, Result)

Ropivacaine hydrochloride

| | | | |
|---------------------------------------|------|----------|---------|
| Green algae | EC50 | 72 hours | 59 mg/L |
| <i>Daphnia magna</i> (Water Flea) | EC50 | 48 hours | 34 mg/L |
| <i>Brachydanio rerio</i> (Zebra Fish) | LC50 | 96 hours | 38 mg/L |

Persistence and Degradability

No data available

Bio-accumulative Potential

Partition Coefficient: (Method, pH, Endpoint, Value)

Ropivacaine hydrochloride

| | | |
|-------------------|-------|------|
| No data available | Log P | 2.15 |
|-------------------|-------|------|

Mobility in Soil

No data available

Section 13: Disposal Considerations

Section 13, Disposal Considerations

Waste Treatment Methods:

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

| Section 14: Transport Information | |
|---|--------------------------|
| Section 14, Transport Information | |
| The following refers to all modes of transportation unless specified below. Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations. | |
| Section 15: Regulatory Information | |
| Section 15, Regulatory Information | |
| Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture | |
| Water for Injection | |
| CERCLA/SARA 313 Emission reporting | Not listed |
| California Proposition 65 | Not listed |
| Inventory – United States TSCA – Sect 8(b) | Present |
| Australia (AICS) | Present |
| REACH – Annex IV – Exemptions from the Obligations of Register | Present |
| EU EINECS/ELINCS List | 231-791-2 |
| Hydrochloric Acid | |
| CERCLA/SARA 313 Emission reporting | 1.0% |
| CERCLA/SARA Hazardous Substances and Their reportable quantities | 5000 lb 2270 kg |
| CERCLA/SARA – Section 302 Extremely Hazardous TPQs | 500 lb |
| CERCLA/SARA – Section 302 Extremely Hazardous Substances EPCRA RQs | 5000 lb |
| California Proposition 65 | Not listed |
| Inventory – United States TSCA – Sect 8(b) | Present |
| Australia (AICS) | Present |
| Standard for the Uniform Scheduling For Drugs and Poisons | Schedule 5 Schedule 6 |
| EU EINECS/ELINCS List | 231-595-7 |
| Sodium Chloride | |
| CERCLA/SARA 313 Emission reporting | Not listed |
| California Proposition 65 | Not listed |
| Inventory – United States TSCA – Sect 8(b) | Present |
| Australia (AICS) | Present |
| EU EINECS/ELINCS List | 231-598-3 |
| Sodium Hydroxide | |
| CERCLA/SARA 313 Emission reporting | Not listed |
| CERCLA/SARA Hazardous Substances and Their reportable quantities | 1000 lb 454 kg |
| California Proposition 65 | Not listed |
| Inventory – United States TSCA – Sect 8(b) | Present |
| Australia (AICS) | Present |
| Standard for the Uniform Scheduling For Drugs and Poisons | Schedule 5 Schedule 6 |

| | |
|---|------------|
| EU EINECS/ELINCS List | 215-185-5 |
| Citric acid, anhydrous | |
| CERCLA/SARA 313 Emission reporting | Not listed |
| California Proposition 65 | Not listed |
| Inventory – United States TSCA – Sect 8(b) | Present |
| Australia (AICS) | Present |
| EU EINECS/ELINCS List | 201-069-1 |
| Sodium citrate, dihydrate | |
| CERCLA/SARA 313 Emission reporting | Not listed |
| California Proposition 65 | Not listed |
| Australia (AICS) | Present |
| EU EINECS/ELINCS List | Not listed |
| Ropivacaine hydrochloride | |
| CERCLA/SARA 313 Emission reporting | Not listed |
| California Proposition 65 | Not listed |
| EU EINECS/ELINCS List | Not listed |

Section 16: Other Information

Section 16, Other Information

Text of CLP/GHS Classification abbreviations mentioned in Section 3

Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed
 Hazardous to the aquatic environment, acute toxicity-Cat.3; H402 - Harmful to aquatic life
 Hazardous to the aquatic environment, chronic toxicity-Cat.3; H412 - Harmful to aquatic life with long lasting effects
 Skin corrosion/irritation-Cat.1A; Skin corrosion/irritation-Cat.1B; H314 - Causes severe skin burns and eye damage
 Specific target organ toxicity, single exposure; Respiratory tract irritation-Cat.3; H335 - May cause respiratory irritation

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Nothing herein shall be deemed to create any warranty, express or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.

SOLA shall not be held liable for any damage resulting from handling or from contact with the above product. SOLA reserves the right to revise this Safety Data Sheet.